

Serial Number: 09/900,518A

CRF Processing Date: 5/31/02
Edited by: M. SPENCER
Verified by: _____ (STIC sta)

- Changed a file from non-ASCII to ASCII
- Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- Edited a format error in the Current Application Data section, specifically:
- Edited the Current Application Data section with the actual current number. The number inputted by the applicant was the prior application data; or other _____.
- Added the mandatory heading and subheadings for "Current Application Data".
- Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- Changed the spelling of a mandatory field (the headings or subheadings), specifically:
- Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:
- Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:
- Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- Inserted colons after headings/subheadings. Headings edited included:
- Deleted extra, invalid, headings used by an applicant, specifically:
- Deleted: non-ASCII "garbage" at the beginning/end of files; secretary initials/filename at end of file;
 page numbers throughout text; other invalid text, such as _____
- Inserted mandatory headings, specifically:
- Corrected an obvious error in the response, specifically:
- Edited identifiers where upper case is used but lower case is required, or vice versa.
- Corrected an error in the Number of Sequences field, specifically:
- A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- Other:

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

ENTERED



OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/900,518A

DATE: 05/31/2002

TIME: 14:04:00

Input Set : A:\PTOMS.txt
 Output Set: N:\CRF3\05312002\I900518A.raw

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4 <110> APPLICANT: Allen, Keith D.
5      Zhang, Qin
7 <120> TITLE OF INVENTION: TRANSGENIC MICE CONTAINING CX2 GENE
8      DISRUPTIONS
10 <130> FILE REFERENCE: R-716
12 <140> CURRENT APPLICATION NUMBER: US 09/900,518A
13 <141> CURRENT FILING DATE: 2001-07-06
15 <150> PRIOR APPLICATION NUMBER: US 60/216,178
16 <151> PRIOR FILING DATE: 2000-07-06
18 <160> NUMBER OF SEQ ID NOS: 4
20 <170> SOFTWARE: FastSEQ for Windows Version 4.0
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 2490
24 <212> TYPE: DNA
25 <213> ORGANISM: Mus musculus
27 <400> SEQUENCE: 1
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30 agagcgggca tggcccgctt ggggaccgcg tggccctgcgc tggcgctgjc cctggcactt 180
31 gtggcggtgg ccctggctgg agtcagagcc caggcgccag cttcgagga gcctgactat 240
32 tacagccagg agctctggcg ggcggggcgc tattatggc atccggagcc tgagccggag 300
33 ccggagctct tctcgcccttc aatgcataaa gaccttaggg tggaggagca ggaacagcag 360
34 gagccgcacc agcagggccaa cagaactccc aagaaggcca tcaagcccaa gaaggctccc 420
35 aagagggaga agtttgtc agagacgcct ccaccaggta aaaatagcaa cagaaaaggc 480
36 agaagaagca agaatcttga gaaagctgcc agtgatgacc atggtgtccc tgtgctcat 540
37 gagatgtca gagagagttt cccacctt ggtctggaaa cattaaaaat cacagacttc 600
38 cagctgcattt cctccacatc gaagcgttat ggcctggag cccaccgggg gagactcaac 660
39 atccaggcag gcattaatga aaatgacttt tacatgggg ctgggtgtgc tggtaggaac 720
40 gacttgcattt agtggatcga agtggatgcc cggcgcttgc ccaagttcac aggggtcatt 780
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51 ttgggtggagg agactcgaat ccacattcta ccctccctca atcctgtatgg ctatgagaag 1440
52 gcctatgaag gaggttccga gtggggagggc tggccctgg gacgttggac ccatgatggc 1500
53 atcgatatca acaacaactt tccggattt aactcgctgc tctgggagggc agaggaccag 1560
54 cagaatgccc caaggaaggt ccccaaccac tacattgcca tccctgagtg gtttctgtct 1620

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55 gagaatgcca cagtggccac agagaccaga gccgtcatcg cctggatgga gaagatcccc 1680
 56 tttgtgctgg gaggcaacct acaggggggt gagctggtcg tggcataccc ctatgacatg 1740
 57 gtgcggtccc tgtggaagac ccaggagcac accccaacac ctgatgatca tgtttccgc 1800
 58 tggctggcgt attcctacgc ctccactcac cgccctcatga cagatgccaag gaggcgagtg 1860
 59 tgccacacgg aagatttca gaaggaggag ggcaccgtca atggggcttc ctggcacaca 1920
 60 gtggctggaa gtctaaacga tttagctac ctccatacaa actgcttga gctgtccatc 1980
 61 tacgtggcgt gtgataaata cccacacgag agcgagctgc cggaggaatg ggagaataac 2040
 62 cgggagtctc tgattgtgtt catggagcag gttcatcgag gcatcaaagg catagtgaga 2100
 63 gatttacaag ggaaagggtt tc当地atgt gtc当地tctg tggaggtgt taaccatgac 2160
 64 atccggacag ccagcgttgg ggattactgg cgtctactga accctggcga atatgtggtc 2220
 65 acagccaagg cggaggctt tatcacttcc accaagaact gcatggttgg ctatgatatg 2280
 66 ggagctactc ggtgtgactt caccctcaca aagaccaacc tggcttaggat aagagaaatt 2340
 67 atggagacat ttgggaagca gc当地gtcagc ctaccctcca ggccctgaa gctgcgggga 2400
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 74 <213> ORGANISM: Mus musculus
 76 <400> SEQUENCE: 2
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 78 1 5 10 15
 79 Leu Val Ala Val Ala Leu Ala Gly Val Arg Ala Gln Gly Ala Ala Phe
 80 20 25 30
 81 Glu Glu Pro Asp Tyr Tyr Ser Gln Glu Leu Trp Arg Arg Gly Arg Tyr
 82 35 40 45
 83 Tyr Gly His Pro Glu Pro Glu Pro Glu Leu Phe Ser Pro Ser
 84 50 55 60
 85 Met His Glu Asp Leu Arg Val Glu Glu Gln Glu Gln Gln Glu Pro His
 86 65 70 75 80
 87 Gln Gln Gly His Arg Thr Pro Lys Lys Ala Ile Lys Pro Lys Lys Ala
 88 85 90 95
 89 Pro Lys Arg Glu Lys Leu Val Ala Glu Thr Pro Pro Pro Gly Lys Asn
 90 100 105 110
 91 Ser Asn Arg Lys Gly Arg Arg Ser Lys Asn Leu Glu Lys Ala Ala Ser
 92 115 120 125
 93 Asp Asp His Gly Val Pro Val Ala His Glu Asp Val Arg Glu Ser Cys
 94 130 135 140
 95 Pro Pro Leu Gly Leu Glu Thr Leu Lys Ile Thr Asp Phe Gln Leu His
 96 145 150 155 160
 97 Ala Ser Thr Ser Lys Arg Tyr Gly Leu Gly Ala His Arg Gly Arg Leu
 98 165 170 175
 99 Asn Ile Gln Ala Gly Ile Asn Glu Asn Asp Phe Tyr Asp Gly Ala Trp
 100 180 185 190
 101 Cys Ala Gly Arg Asn Asp Leu His Gln Trp Ile Glu Val Asp Ala Arg
 102 195 200 205
 103 Arg Leu Thr Lys Phe Thr Gly Val Ile Thr Gln Gly Arg Asn Ser Leu
 104 210 215 220
 105 Trp Leu Ser Asp Trp Val Thr Ser Tyr Lys Val Met Val Ser Asn Asp

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| | | | | |
|-----|---|-----|-----|-----|
| 106 | 225 | 230 | 235 | 240 |
| 107 | Ser His Thr Trp Val Thr Val Lys Asn Gly Ser Gly Asp Met Ile Phe | | | |
| 108 | 245 | 250 | 255 | |
| 109 | Glu Gly Asn Ser Glu Lys Glu Ile Pro Val Leu Asn Glu Leu Pro Val | | | |
| 110 | 260 | 265 | 270 | |
| 111 | Pro Met Val Ala Arg Tyr Ile Arg Ile Asn Pro Gln Ser Trp Phe Asp | | | |
| 112 | 275 | 280 | 285 | |
| 113 | Asn Gly Ser Ile Cys Met Arg Met Glu Ile Leu Gly Cys Pro Leu Pro | | | |
| 114 | 290 | 295 | 300 | |
| 115 | Asp Pro Asn Asn Tyr Tyr His Arg Arg Asn Glu Met Thr Thr Thr Asp | | | |
| 116 | 305 | 310 | 315 | 320 |
| 117 | Asp Leu Asp Phe Lys His His Asn Tyr Lys Glu Met Arg Gln Leu Met | | | |
| 118 | 325 | 330 | 335 | |
| 119 | Lys Val Val Asn Glu Met Cys Pro Asn Ile Thr Arg Ile Tyr Asn Ile | | | |
| 120 | 340 | 345 | 350 | |
| 121 | Gly Lys Ser His Gln Gly Leu Lys Leu Tyr Ala Val Glu Ile Ser Asp | | | |
| 122 | 355 | 360 | 365 | |
| 123 | His Pro Gly Glu His Glu Val Gly Glu Pro Glu Phe His Tyr Ile Ala | | | |
| 124 | 370 | 375 | 380 | |
| 125 | Gly Ala His Gly Asn Glu Val Leu Gly Arg Glu Leu Leu Leu Leu | | | |
| 126 | 385 | 390 | 395 | 400 |
| 127 | Leu His Phe Leu Cys Gln Glu Tyr Ser Ala Gln Asn Ala Arg Ile Val | | | |
| 128 | 405 | 410 | 415 | |
| 129 | Arg Leu Val Glu Glu Thr Arg Ile His Ile Leu Pro Ser Leu Asn Pro | | | |
| 130 | 420 | 425 | 430 | |
| 131 | Asp Gly Tyr Glu Lys Ala Tyr Glu Gly Ser Glu Leu Gly Gly Trp | | | |
| 132 | 435 | 440 | 445 | |
| 133 | Ser Leu Gly Arg Trp Thr His Asp Gly Ile Asp Ile Asn Asn Asn Phe | | | |
| 134 | 450 | 455 | 460 | |
| 135 | Pro Asp Leu Asn Ser Leu Leu Trp Glu Ala Glu Asp Gln Gln Asn Ala | | | |
| 136 | 465 | 470 | 475 | 480 |
| 137 | Pro Arg Lys Val Pro Asn His Tyr Ile Ala Ile Pro Glu Trp Phe Leu | | | |
| 138 | 485 | 490 | 495 | |
| 139 | Ser Glu Asn Ala Thr Val Ala Thr Glu Thr Arg Ala Val Ile Ala Trp | | | |
| 140 | 500 | 505 | 510 | |
| 141 | Met Glu Lys Ile Pro Phe Val Leu Gly Gly Asn Leu Gln Gly Glu | | | |
| 142 | 515 | 520 | 525 | |
| 143 | Leu Val Val Ala Tyr Pro Tyr Asp Met Val Arg Ser Leu Trp Lys Thr | | | |
| 144 | 530 | 535 | 540 | |
| 145 | Gln Glu His Thr Pro Thr Pro Asp Asp His Val Phe Arg Trp Leu Ala | | | |
| 146 | 545 | 550 | 555 | 560 |
| 147 | Tyr Ser Tyr Ala Ser Thr His Arg Leu Met Thr Asp Ala Arg Arg Arg | | | |
| 148 | 565 | 570 | 575 | |
| 149 | Val Cys His Thr Glu Asp Phe Gln Lys Glu Glu Gly Thr Val Asn Gly | | | |
| 150 | 580 | 585 | 590 | |
| 151 | Ala Ser Trp His Thr Val Ala Gly Ser Leu Asn Asp Phe Ser Tyr Leu | | | |
| 152 | 595 | 600 | 605 | |
| 153 | His Thr Asn Cys Phe Glu Leu Ser Ile Tyr Val Gly Cys Asp Lys Tyr | | | |
| 154 | 610 | 615 | 620 | |

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/900,518A

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Input Set : A:\PTOMS.txt
Output Set: N:\CRF3\05312002\I900518A.raw

155 Pro His Glu Ser Glu Leu Pro Glu Glu Trp Glu Asn Asn Arg Glu Ser
156 625 630 635 640
157 Leu Ile Val Phe Met Glu Gln Val His Arg Gly Ile Lys Gly Ile Val
158 645 650 655
159 Arg Asp Leu Gln Gly Lys Gly Ile Ser Asn Ala Val Ile Ser Val Glu
160 660 665 670
161 Gly Val Asn His Asp Ile Arg Thr Ala Ser Asp Gly Asp Tyr Trp Arg
162 675 680 685
163 Leu Leu Asn Pro Gly Glu Tyr Val Val Thr Ala Lys Ala Glu Gly Phe
164 690 695 700
165 Ile Thr Ser Thr Lys Asn Cys Met Val Gly Tyr Asp Met Gly Ala Thr
166 705 710 715 720
167 Arg Cys Asp Phe Thr Leu Thr Lys Thr Asn Leu Ala Arg Ile Arg Glu
168 725 730 735
169 Ile Met Glu Thr Phe Gly Lys Gln Pro Val Ser Leu Pro Ser Arg Arg
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176 <211> LENGTH: 200
177 <212> TYPE: DNA
178 <213> ORGANISM: Artificial Sequence
180 <220> FEATURE:
181 <223> OTHER INFORMATION: Targeting Vector
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189 <210> SEQ ID NO: 4
190 <211> LENGTH: 200
191 <212> TYPE: DNA
192 <213> ORGANISM: Artificial Sequence
194 <220> FEATURE:
195 <223> OTHER INFORMATION: Targeting Vector
197 <400> SEQUENCE: 4
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200 tgagcccagc caaatcctg tgggcctgt gttattccct agagactaca tctgagctaa 180
201 gttcagcttt ctctccctgc 200

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/900,518A

DATE: 05/31/2002

TIME: 14:04:01

Input Set : A:\PTOMS.txt

Output Set: N:\CRF3\05312002\I900518A.raw

Does Not Comply
Corrected Diskette Needed



OIPE

RAW SEQUENCE LISTING

DATE: 05/23/2002

PATENT APPLICATION: US/09/900,518A

TIME: 17:47:37

Input Set : A:\R-716 sequence listing for submission.txt
 Output Set: N:\CRF3\05232002\I900518A.raw

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4 <110> APPLICANT: Allen, Keith D.
5      Zhang, Qin
7 <120> TITLE OF INVENTION: TRANSGENIC MICE CONTAINING CX2 GENE
8      DISRUPTIONS
10 <130> FILE REFERENCE: R-716
12 <140> CURRENT APPLICATION NUMBER: US 09/900,518A
13 <141> CURRENT FILING DATE: 2001-07-06
15 <150> PRIOR APPLICATION NUMBER: US 60/216,178
16 <151> PRIOR FILING DATE: 2000-07-06
18 <160> NUMBER OF SEQ ID NOS: 4
20 <170> SOFTWARE: FastSEQ for Windows Version 4.0

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ERRORED SEQUENCES

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189 <210> SEQ ID NO: 4
190 <211> LENGTH: 200
191 <212> TYPE: DNA
192 <213> ORGANISM: Artificial Sequence
194 <220> FEATURE:
195 <223> OTHER INFORMATION: Targeting Vector
197 <400> SEQUENCE: 4
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200 ttagcccaagc caaagtccctg tggtgcctgt gttattccct agagactaca tctgagctaa 180
201 gttcagcttt ctctccctgc                                200

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E--> 205 1

remove extra material from end
of file

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/900,518A

DATE: 05/23/2002
TIME: 17:47:38

Input Set : A:\R-716 sequence listing for submission.txt
Output Set: N:\CRF3\05232002\I900518A.raw

L:205 M:254 E: No. of Bases conflict, this line has no nucleotides.